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(54) **GAS SEPARATION MEMBRANES BASED ON FLUORINATED AND PERFLUORINATED POLYMERS**

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See application file for complete search history.

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(57) **ABSTRACT**

A process for separating components of a gas mixture using gas-separation copolymer membranes. These membranes use a selective layer made from copolymers of an amorphous perfluorinated dioxolane and a fluorovinyl monomer. The resulting membranes have superior selectivity performance for gas pairs of interest while maintaining fast gas permeance compared to membranes prepared using conventional perfluoropolymers such as Teflon® AF, Hlyflon® AD, and Cytot®.

15 Claims, No Drawings